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ABSTRACT OF THE DISCLOSURE

A method to utilize unscheduled bandwidth in a calendar-based VC scheduling scheme by caching a plurality of virtual connections for processing. A plurality of virtual connection addresses are stored in a cache memory. A virtual connection corresponding to one of these addresses is processed if one of the time periods for transmitting on the trunk is liable to be wasted because no cell is available through the normal calendaring algorithm. A VC cache is added to the VC scheduler in "parallel" with the calendar-based scheduler. When the calendar-based scheduler has a time period in which no VC is scheduled for transmission on the trunk, a VC address is obtained from the cache and that VC is processed. What makes this scheme work is the observation that the VCs that have been active will have more cells to transmit.